



NÁRODNÁ BANKA SLOVENSKA  
EUROSYSTEM



# MEDIUM-TERM FORECAST

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# 1 OVERVIEW

The Slovak economy grew slightly more slowly in the third quarter of 2016 than in the previous quarter, by 0.7% quarter on quarter. The slowdown stemmed from a weakening of foreign demand, which was reflected in lower goods exports and a significant drop in investment activity spread across both public and private investment. In the case of private investment, the decline in its EU-funded component has not been compensated for so far this year. GDP growth was therefore underpinned by private consumption, which was supported by the still improving labour market situation.

**In the light of falling investment demand and softer foreign demand, the GDP growth projection has been revised down to 3.3% for 2016 and 3.1% for 2017** (in each case by 0.2 percentage point from the previous forecast). Subsequent years are expected to see an acceleration in foreign demand and private consumption, a recovery in investment, and the launch of production at a new car plant. **Hence, GDP growth is projected to gather momentum in 2018, to reach 4.2%.** The projection horizon has been extended in this forecast to include 2019, with GDP growth for that year estimated to accelerate further, **to 4.6%.** The economy in 2019 is foreseen to be showing some signs of overheating.

**Labour market developments in the third quarter were better than expected.** As a result, employment growth for the year as a whole, and in 2017, is expected to be higher than project-

ed in the previous forecast (MTF-2016Q3). The increasing labour force participation and large number of new jobs being created has resulted in an all-time high number of people in employment. Job growth is expected to moderate over the projection horizon owing to labour supply shortages, which are expected to translate into a higher number of hours worked and an increase in the number of foreign employees. **The unemployment rate is projected to fall over the forecast period, down to 7.7% by the end of 2019.** Wage growth is expected to be supported by labour productivity growth, and should also begin to reflect a decline in labour market slack and higher increases in public sector wages.

**The inflation rate is expected to enter positive territory around the turn of the year, and then to accelerate gradually.** Its upward path should be supported by rising commodity prices and their pass-through to prices of food and automotive fuel. Services inflation will be boosted not only by nominal wage growth, but also by the induced rise in input prices. In line with rising import prices, industrial goods prices are also expected to climb. Inflation is therefore projected to increase to 2% by the end of the projection horizon. For the first time in a while, no downward revision was made to the inflation forecast. **Thus the period of zero or negative inflation accompanied by strong real wage growth is set to end.**

Both the real GDP and inflation outlooks are subject to balanced risks.

**Table 1 GDP and inflation projections (annual percentage changes)**

	MTF-2016Q4				Difference vis-à-vis MTF-2016Q3		
	2016	2017	2018	2019	2016	2017	2018
GDP	3.3	3.1	4.2	4.6	-0.2	-0.2	0.0
HICP	-0.5	1.2	1.8	1.9	0.0	0.1	0.1
Demand-pull inflation <sup>1)</sup>	0.9	1.6	2.1	2.6	0.0	0.0	0.1

Sources: SO SR and NBS.

1) The HICP inflation rate excluding food, energy and administered prices. It better reflects domestic price pressures than does the overall HICP and, when external shocks fade, it is a more accurate indicator of the future inflation path.



## 2 CURRENT DEVELOPMENTS IN THE EXTERNAL ENVIRONMENT AND IN SLOVAKIA

### EURO AREA GDP GROWTH IN THE THIRD QUARTER OF 2016 UNCHANGED FROM PREVIOUS QUARTER

According to Eurostat's flash estimate, **euro area GDP increased by 0.3%, quarter on quarter, in the third quarter of 2016**, the same pace as in the previous quarter. Growth accelerated in retail trade and construction implying a greater impact of domestic demand on the euro area economy. Relatively strong growth was also observed in industrial production, including in its manufacturing component. This may signal a strengthening of export activity, although available data from national statistical offices are ambiguous on this point. At the same time, their data also point to rising import growth and a weakening contribution from net trade. As for the geographical breakdown of euro area GDP growth, there was heterogeneity across the key national economies. In both France and Italy economic growth increased by 0.3 percentage point (to 0.2% and 0.3% respectively) and in the Netherlands it remained unchanged from the previous quarter (at 0.7%), whereas Germany's GDP growth moderated by 0.2 percentage point (to 0.2%) and Spain's slowed by 0.1 percentage point (to 0.7%). The available leading indicators suggest that economic growth will accelerate slightly in the period ahead. As for the annual HICP inflation rate in November, it was 0.6% according to the flash estimate (up from 0.5% in October). Compared with the previous month, food inflation increased and energy inflation edged slightly further into negative territory.

### SLOVAKIA'S ECONOMIC GROWTH SLOWED MODERATELY OWING TO WEAKER INVESTMENT<sup>1</sup>

Slovakia's GDP increased in the third quarter of 2016 by 0.7%, quarter on quarter, slightly less

than projected in the previous forecast. The composition of growth showed differences from the forecast. The main growth driver was private consumption, although its contribution was lower than projected. A marked fall in investment may have been partly offset by restocking. Exports decreased slightly, reflecting developments in the German economy. A softening of domestic demand and the decline in exports ensured an appreciable drop in imports. The sharper than projected fall in domestic demand prompted a revision of the GDP growth outlook for the period ahead.

Labour market conditions were unaffected by the slight slowdown in economic activity. With firms maintaining marked job creation in the third quarter, employment grew by 0.6%, the same as in previous quarters and notably higher than projected in the September forecast. Most new jobs were created in the services sector. The unemployment rate continued to fall. Wage growth increased modestly in line with projections. The main driver of wage growth was wages in certain services and industry segments in which firms are facing labour supply shortages.

The annual inflation rate became marginally more negative in the third quarter, at -0.7%, but in October, as projected, inflation moderated to -0.3%. This shift was partly caused by rising energy commodity prices and their pass-through to automotive fuel prices. Prices of services and non-energy industrial goods also accelerated.

<sup>1</sup> For further details, see the "Report on the Slovak Economy – December 2016".



## 3 TECHNICAL ASSUMPTIONS OF THE FORECAST<sup>2</sup>

### 3.1 COMMODITIES AND THE EXCHANGE RATE

The **exchange rate**<sup>3</sup> of the euro against the US dollar depreciated slightly between the cut-off dates for the previous forecast (early September) and the latest one. In this forecast (MTF-2016Q4), the assumption for the average exchange rate is USD 1.09 per euro, 2.6% weaker than the assumption in the September forecast. The nominal effective exchange rate (NEER), calculated with respect to Slovakia's 15 most significant trading partners, is 0.1% higher than assumed in the previous forecast.

The **Brent crude oil price** is assumed to be moderately lower compared with the previous forecast. Based on the path implied by futures markets, the price of a barrel Brent crude oil is assumed to be USD 43.1 in 2016, USD 49.3 in 2016, USD 52.6 in 2018 and USD 54.6 in 2019. The assumptions for the oil price in euro have been revised up, by 1.3 % in 2016 and by around 6% in 2017 and 2018.<sup>4</sup>

### 3.2 FOREIGN DEMAND

The euro area economy is projected<sup>5</sup> to continue its recovery, with GDP expected to grow

by 1.7% in both 2016 and 2017, before edging down to 1.6% in both 2018 and 2019. Compared with the ECB's September 2016 projections, the GDP growth forecast for 2017 has been revised up by 0.1 percentage point. Activity growth is expected to remain underpinned by domestic demand, supported by the ECB's accommodative monetary policy stance. Exports are projected to gain momentum over the projection horizon on account of an expected global recovery, resulting in a gradually improving net trade contribution. Subdued import growth in the United Kingdom is expected to prevent a stronger increase in euro area foreign demand. Euro area labour market conditions should continue to improve over the projection horizon.

The projections for **Slovakia's foreign demand** have been revised down in the expectation of weakening demand from the country's trading partners in coming years. Foreign demand growth in 2016 is projected to be unchanged from the previous year (at 3.5%) and to remain at that level in 2017, before accelerating 4.1% in 2018 and then moderating to 4.0% in 2019.

- 2 The technical assumptions of this Medium-Term Forecast are based on the "December 2016 Eurosystem staff macroeconomic projections for the euro area", with a cut-off date of 17 November 2016.
- 3 The bilateral EUR/USD exchange rate is assumed to remain unchanged over the projection horizon at the average level prevailing in the ten-working day period ending on the cut-off date.
- 4 The cut-off date for this forecast came before the increase in oil prices that followed OPEC's agreement (on 30 November) to reduce oil supply, and therefore the forecast does not take this development into account.
- 5 According to the "December 2016 Eurosystem staff macroeconomic projections for the euro area".

## 4 MACROECONOMIC FORECAST FOR SLOVAKIA

### 4.1 ECONOMIC GROWTH

#### TEMPORARY SLOWDOWN IN EXPORTS

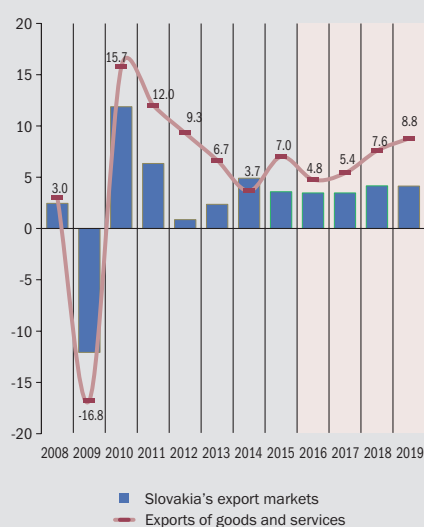
Slovakia's export growth is expected to slow in 2016 amid weakening in foreign demand in the second half of the year. Foreign demand is projected to pick up moderately thereafter, supporting an acceleration in exports. Exports should be further boosted in 2018 and 2019 by the launch of production at a new car plant in Slovakia. The result of these developments is expected to

be an appreciable increase in Slovakia market shares.

#### AFTER FALLING THIS YEAR, INVESTMENT ACTIVITY WILL INCREASE GRADUALLY IN THE YEARS AHEAD

This year's decline in investment activity is put down mainly to a "sobering up" after last year's late surge in the absorption of outstanding EU funds available from the 2007-13 financing period. Public investment slumped, and since private investment growth slowed, it was unable to make up for that decline. In subsequent years, investment growth is foreseen to pick up steadily, reflecting an expected upward path in government investment (particularly in infrastructure projects) and continuing growth in private investment. Private investment should remain buoyed by the accommodative monetary policy stance and by ongoing investment activity in the car industry.

**Chart 1 Forecast for foreign demand and for Slovak exports of goods and services (annual percentage changes; constant prices)**



Sources: SO SR, ECB and NBS calculations.

#### STRONG PRIVATE CONSUMPTION GROWTH OVER PROJECTION HORIZON

Private consumption growth is expected to be slightly higher in 2016 than in the previous year, thanks to the further improvement in the labour market situation and to the positive income effect in the low inflation environment. Nevertheless, households are expected to maintain a rising saving ratio in 2016. An upward trend in employment and in compensation per employee over the projection horizon should be conducive to a further acceleration in private consumption. The average saving ratio for the whole forecast period is expected to be relatively high.

**Table 2 Investment (annual percentage changes; constant prices)**

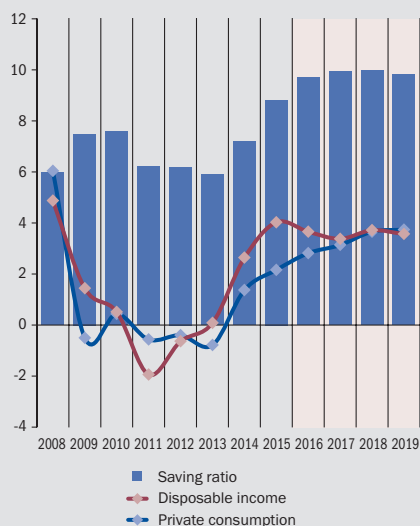
	2015	2016	2017	2018	2019
Gross fixed capital formation in total	16.9	-2.3	2.6	5.7	4.1
– private sector	5.5	9.4	1.1	4.5	4.2
– public sector (including public-private partnerships – PPPs) <sup>1)</sup>	63.7	-33.3	9.1	10.8	3.9

Sources: SO SR and NBS calculations.

<sup>1)</sup> The Bratislava road bypass PPP will be treated as a private investment for statistical purposes, but, technically speaking, is more akin to a public investment.

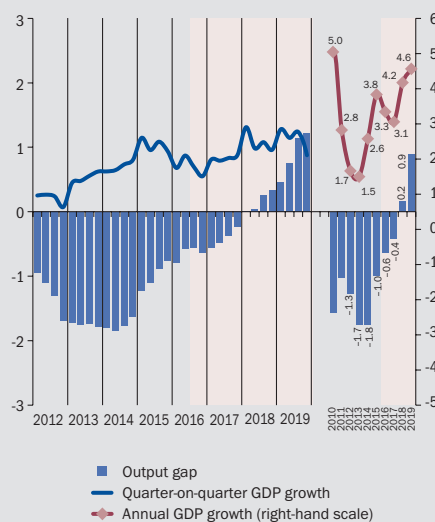


**Chart 2 Household income and consumption (annual percentage changes; constant prices) and the household saving ratio (percentages)**



Sources: SO SR and NBS.

**Chart 3 GDP growth and the output gap (percentages)**



Sources: SO SR and NBS.

#### ECONOMY TO GROW BRISKLY OVER THE PROJECTION HORIZON

The projected dip in economic growth in 2016 and 2017 is expected to stem from the softening of foreign demand and from a decline in investment activity amid substantially reduced inflows of EU funds. **Slovakia's GDP is expected to grow by 3.3% this year and by 3.1% in 2017.** As foreign demand picks up in the medium term, it should contribute to an upturn in

export performance. Export growth will, however, be driven mainly by the launch of production at a new car plant. After a temporary slowdown, domestic demand growth is expected to accelerate. **Hence, the economic growth forecasts for 2018 and 2019 are 4.2% and 4.6% respectively.** Given the relative strength of GDP growth, the economy could begin to overheat slightly in 2018 and to an even greater extent in 2019.

#### Box 1

##### MEDIUM-TERM FORECAST REFLECTS IMPACT OF CAR INDUSTRY

According to this forecast (MTF-2016Q4), Slovakia should experience solid economic growth over the projection horizon, accelerating up to 4.6% in 2019. Much of that significant increase in GDP growth is attributable to new investment in the car industry, which has had a considerable impact on the outlook both for overall growth and for its components, in particular investment and exports.

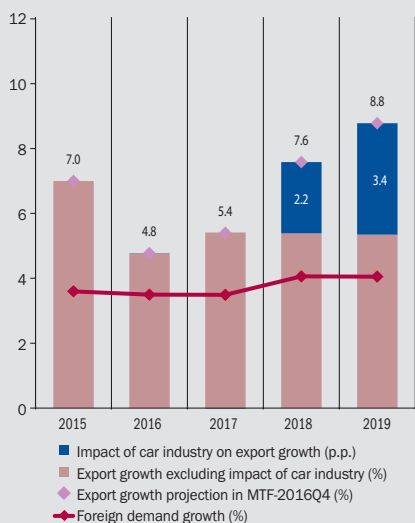
Carmakers in Slovakia are expected to have a positive impact on investment growth in 2016 and 2017, not least because Jaguar Land

Rover (JLR) is establishing a new plant and importing new technological equipment for it. The effects of new investment are expected to unwind in subsequent years, when the car industry should make a negative contribution to overall investment growth.

The industry's contribution to economic growth is expected to peak in 2019, at the end of the forecast period. The new car production will have a positive impact on the export performance of the Slovak economy. Taking into account the launch of production at JLR's new



**Chart A Estimated impact of new car industry investment on export growth Services balance**



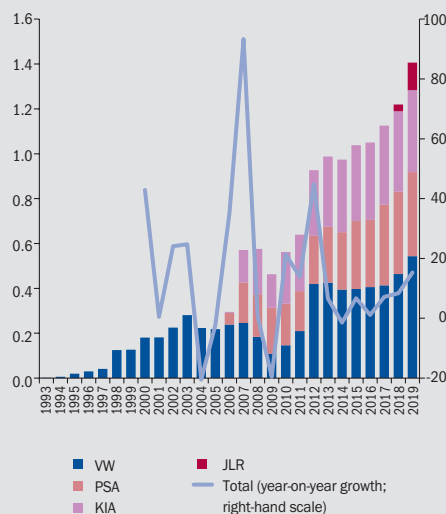
Source: NBS calculations.

plant, as well as a further increase in output capacity in the broader Slovak car industry, export growth is projected to reach almost 9% in 2019. Market share gains are projected over the whole forecast period – even abstracting from the positive impact of increased car production – since exports are expected to grow more than foreign demand.

The new JLR plant in Nitra is due to begin production of Land Rover Discovery models in 2018. As a result, the annual percentage growth in the number of cars produced in Slovakia is projected to increase by 2.7 percentage points in 2018 and by 7.3 percentage points in 2019. By that time, the total car production could be as high as 1.4 million units per year. When running at full capacity, beyond the production horizon, the JLR plant is expected to produce around 150,000 cars per year.

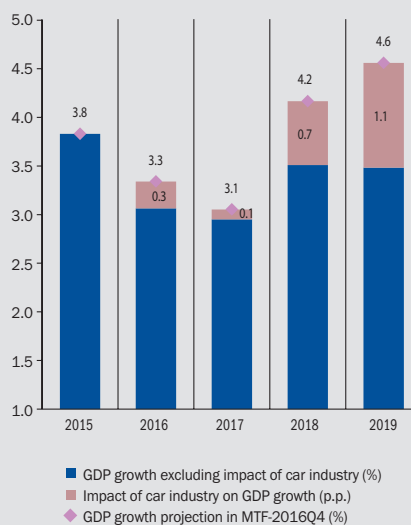
According to model estimates, the impact of car industry investment (including increased production) on GDP growth up to 2019 could be, cumulatively, 2.1 percentage points. The modelling exercise takes into account both the direct effects of the investment and the indirect secondary effects. Car production

**Chart B Estimated number of cars produced (millions of units)**



Source: Carmakers' annual reports and the Automotive Industry Association of the Slovak Republic (ZAP SR).

**Chart C Estimated impact of new car industry investment on real GDP growth**



Source: NBS calculations.

## 4.2 THE LABOUR MARKET

THE LABOUR MARKET SITUATION IS EXPECTED TO REMAIN FAVOURABLE

Economic growth is continuing to support an upward trend in job creation. This year's employment growth in Slovakia is expected to be the second highest ever, bettered only by the rate in 2008, before the Great Recession. According to surveys of firms' expectations, net job creation is expected to continue in the period ahead. Subsequent years should see a slowdown in job growth, given that firms have overadjusted to the post-crisis labour market and that employment in the economy is now at a historical high. Firms may address labour supply shortages by recruiting pensioners and foreign workers and by employing more people on a part-time basis. This should support the supply side of the labour market and a gradual increase in the labour force participation rate. Firms may also compensate for shortages of skilled staff by increasing the number of hours worked by existing staff. Such developments are expected to accelerate wage growth, with a positive impact on private consumption.

The unemployment rate is projected to maintain its downward path, falling to 7.7% by the end of 2019. The main reason for the unemployment rate not falling further is the increasing labour force participation.

Nominal wages should increase quite strongly owing to the impact of rising labour productivity, increasing inflation, and declining labour

Chart 4 Employment, hours worked (annual percentage changes), and the unemployment rate (percentages)



Source: SO SR and NBS.

market slack. The projections included higher wage bargains in the public sector, which will continue to see higher wage growth than the private sector.

## 4.3 PRICE DEVELOPMENTS

### INCREASING PRICES FROM 2017

The inflation rate is expected to move out of negative territory around the turn of the year. Thus the period of zero or negative inflation accompanied by strong real wage growth is set to end. The

Table 3 Wages (annual percentage changes)

	2015	2016	2017	2018	2019
Nominal labour productivity	1.4	0.6	3.0	5.1	5.8
Whole economy – nominal	2.9	3.4	4.0	4.5	4.6
Whole economy – real	3.2	3.9	2.7	2.6	2.5
Private sector – nominal	2.8	3.0	3.7	4.3	4.6
Private sector – real	3.1	3.5	2.4	2.4	2.5
Public administration, education and health care – nominal	3.3	5.1	4.9	4.9	4.5
Public administration, education and health care – real	3.7	5.7	3.6	3.0	2.4

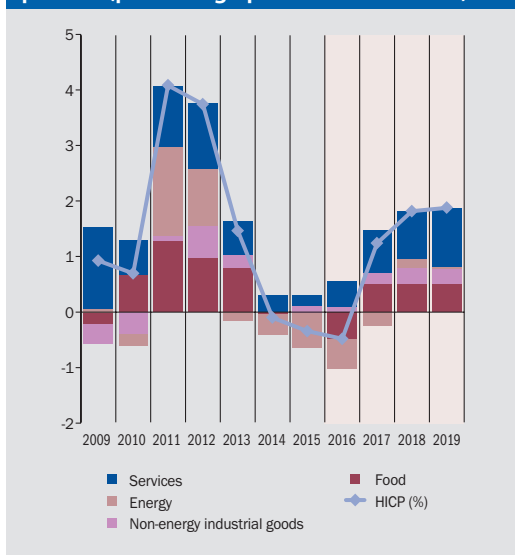
Sources: SO SR and NBS calculations.

Note: Deflated by the CPI. The sector 'Public administration, education and health care' corresponds to sections O, P and Q of the SK NACE Rev. 2 statistical classification of economic activities. Nominal average wage growth in the general government sector (ESA S.13) is projected to be 5.2% in 2016, 4.9% in 2017, 4.9% in 2018 and 4.5% in 2019.

acceleration of inflation from next year is expected to be driven by food prices, given the technical assumptions for food commodity prices and the fading effect of last January's VAT reductions on selected foodstuffs. Services prices are also expected to contribute positively to the headline inflation rate, owing to the secondary effects of rising input prices and a pick-up in domestic demand. Oil prices are projected to have a positive

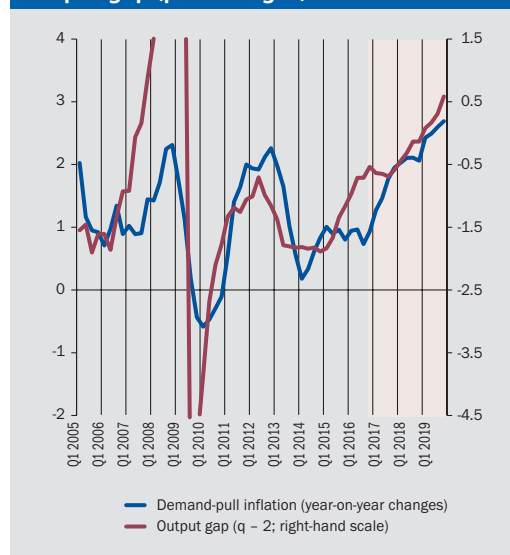
impact on energy prices. After three years of minimal growth, non-energy industrial goods prices are also expected to increase gradually, reflecting a rising trend in import prices. Meanwhile, the decline in labour market slack and increase in nominal wage growth is expected gradually to accelerate services inflation. The annual inflation rate is projected to climb to 1.2% in 2017 and then to remain steady at just below 2%.

**Chart 5 Annual HICP inflation and its component (percentage point contributions)**



Sources: SO SR and NBS.

**Chart 6 Demand-pull inflation and the output gap (percentages)**



Sources: SO SR and NBS calculations.

**Table 4 Inflation components (annual percentage changes)**

	Average 2004-2008 (pre-crisis period)	Average 2010-2014 (post-crisis period)	2015	2016	2017	2018	2019
HICP	4.1	2.0	-0.1	-0.5	1.2	1.8	1.9
Food	3.6	3.1	-0.2	-2.0	2.1	2.2	2.1
Non-energy industrial goods	0.2	0.3	0.0	0.3	0.7	0.9	0.9
Energy	8.3	2.3	-2.2	-3.6	-1.6	1.1	0.2
Services	5.3	2.5	1.0	1.5	2.4	2.7	3.3
Demand-pull inflation	1.8	1.0	0.5	0.9	1.6	2.1	2.6

Sources: SO SR and NBS calculations.

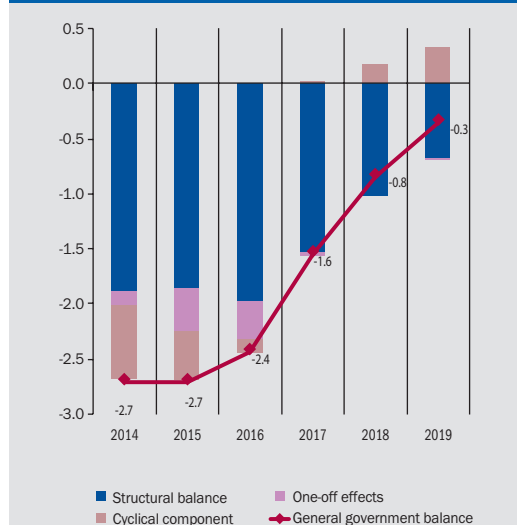
Note: The 'neutral level' of price growth (i.e. beta-convergence) for Slovakia is estimated to be around 2.7%. Further information may be found in an analytical report entitled in Slovak "Perspektívy dlhodobějšího vývoja slovenskej ekonomiky (do roku 2020)" ("Longer-term outlooks for the Slovak economy (up to 2020)").

## 5 FISCAL OUTLOOK

### FAVOURABLE MACROECONOMIC TRENDS, LOW INTEREST COSTS AND REVENUE MEASURES ARE REDUCING THE FISCAL DEFICIT

After a review conducted in October as part of the excessive deficit procedure (EDP) imposed on Slovakia, the general government budget deficit for 2015 was revised to 2.7% of GDP, 0.3 percentage point lower than the original forecast, thanks largely to higher corporate income tax collection. The fiscal deficit is projected to fall in subsequent years, to 2.4% of GDP in 2016<sup>6</sup>, 1.6% in 2017, 0.8% in 2018 and 0.3% in 2019. This gradual decline in the deficit is expected to be supported mainly by continuing economic growth, favourable labour market conditions, and low inflation (having a positive impact on inflation-indexed social expenditure). Low interest costs are continuing to have a positive impact, and from 2017 so will government measures, particularly on the revenue side. The projections take into account measures contained in the government-approved 2017-19 general government budget<sup>7</sup>.

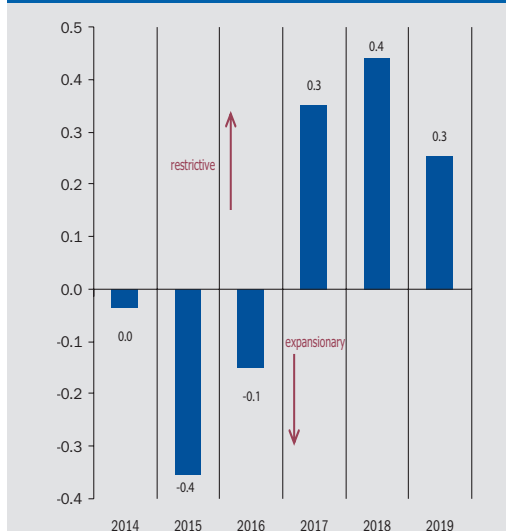
**Chart 7 Breakdown of the general government balance (percentages of GDP)**



Sources: SO SR and NBS.

Note: One-off factors include non-cyclical effects that have a temporary impact on the general government balance and should be eliminated in the future.

**Chart 8 Fiscal stance (year-on-year change in percentage points)**



Sources: SO SR and NBS.

Note: Annual rate of change in the cyclically adjusted primary balance. Excluding the impact of EU funds outside the public sector.

### GRADUAL PICK-UP IN GENERAL GOVERNMENT EXPENDITURE AND IN INVESTMENT

The falling growth trend in general government final consumption expenditure is expected to continue in 2017, as spending on health care is tightened. At the same time, rising inflation should dampen expenditure growth in real terms. Real government expenditure growth is expected to accelerate gradually over the projection horizon.

Public investment fell more sharply than expected in the first three quarters of 2016, owing to the slower absorption of EU funds under the new financing period. The extent of their absorption is expected to increase gradually next year, providing some boost to investment activity. Investment is not expected to pick up significantly, however, until 2018.

- 6 Further details may be found in an analytical report, available only in Slovak, entitled: *Analýza Návrhu rozpočtu verejnej správy na roky 2017 – 2019 (Analysis of the Draft General Government Budget for 2017-19)*. Under the new macroeconomic forecast, the estimated fiscal deficits for 2016 and 2017 are, respectively, reduced by 0.1 percentage point of GDP and left unchanged.
- 7 Tax revenue is expected to be boosted from the beginning of 2017 by, in particular, the prolongation and doubling of the special levy in regulated industries and the retention of the special levy on financial institutions at its current level. Further revenue-generating measures include increasing tax on tobacco products, increasing tax on gambling business, and extending the application of the 8% levy on compulsory motor insurance to more lines of non-insurance business. In 2018 the tax on dividends is expected to be raised. Another addition to revenue should come from the cancellation of health insurance contribution ceilings in certain categories of social insurance. The impact of these measures will be partly offset by a reduction in the corporate income tax rate, to 21% and progressive increase in the old-age pension insurance contribution rates in the second pillar of the pension system. In the area of non-tax revenue, an increase in the fee for maintaining strategic oil reserves is expected to increase revenue. On the expenditure side, this year's overall expenditure is expected to have been raised by a further salary increase for teachers, a stronger correction in income from EU funds, and an increase in Christmas bonuses for pensioners. Next year should see further upward pressure on expenditure from an automatic minimum increase in pensions as well as from further, relatively high increases in public sector salaries.



**Table 5 Fiscal developments and forecasts (annual percentage changes at constant prices, unless otherwise stated)**

	2015	2016	2017	2018	2019
General government final consumption	5.4	2.9	0.9	1.3	1.7
Government investment (including PPP) <sup>1)</sup>	63.7	-33.3	9.1	10.8	3.9
General government balance (percentage of GDP)	-2.7	-2.4	-1.6	-0.8	-0.3
Fiscal stance <sup>2)</sup> (year-on-year change in percentage points)	-0.4	-0.1	0.3	0.4	0.3
Gross debt (percentage of GDP)	52.5	52.9	52.6	51.1	50.1

Sources: SO SR and NBS calculations.

1) NBS assumes that the Bratislava road bypass PPP will be treated as non-public sector asset for statistical purposes and will therefore be formally classified as a private investment.

2) The annual rate of change in the cyclically adjusted primary balance adjusted for the impact of PPPs not included in the general government balance and excluding the impact of EU funds absorbed outside the public sector.

#### **GOVERNMENT DEBT EXPECTED TO REMAIN BELOW DEBT BRAKE THRESHOLD OF 53% OF GDP**

The autumn revision of GDP figures resulted in the 2015 government debt being revised down by 0.4 percentage point, to 52.5% of GDP. The

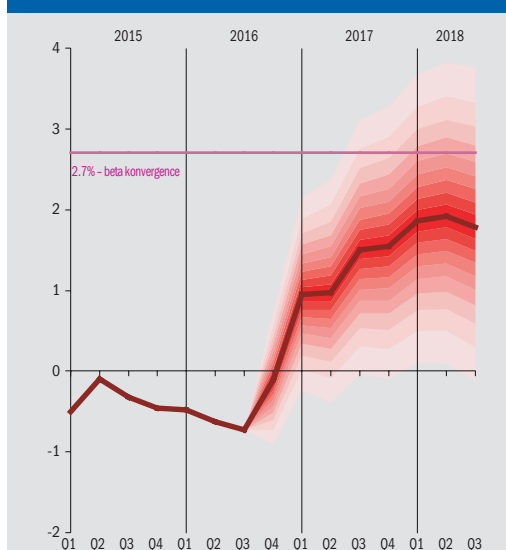
debt for 2016 is projected to increase to 52.9% of GDP. Thereafter, mainly owing to an improving primary balance and lower interest costs, the debt is expected to fall gradually down to 50.1% of GDP by the end of 2019.

## 6 RISKS TO THE FORECAST

In medium-term horizon, the risks to the GDP growth outlook are balanced. Downside risks include more moderate than projected absorption of EU funds and weaker private investment in an environment of persisting geopolitical risks and heightened uncertainty. The outlook could be surprised on the upside by developments in general government expenditure and by lower than projected household saving rates.

The risks to the inflation outlook are balanced. The upside risk of a higher than expected increase in oil prices (following OPEC's decision to reduce oil supply) could be partly offset by lower foreign demand.

**Chart 9 HICP inflation forecast (percentages)**



Sources: SO SR and NBS.

Notes: The chart is calculated using historical inflation prediction errors and a risk survey. The chart's construction is described in more detail at: [http://www.nbs.sk/\\_img/Documents/PUBLIK/MU/pris\\_04.pdf](http://www.nbs.sk/_img/Documents/PUBLIK/MU/pris_04.pdf), or [http://www.nbs.sk/\\_img/Documents/PUBLIK/MU/Hucek\\_Gavura09-07-Biatec.pdf](http://www.nbs.sk/_img/Documents/PUBLIK/MU/Hucek_Gavura09-07-Biatec.pdf).

Beta convergence – refers to a process in which countries with lower GDP (per capita) have a tendency to grow faster than countries with higher GDP and therefore catch up on them. The same process applies in price level convergence. Further information is available in an analytical report entitled in Slovak "Perspektivy dlhodobějšího vývoja slovenskej ekonomiky (do roku 2020)" ("Longer-term outlooks for the Slovak economy (up to 2020)")

**Table 6 Risks to the forecast**

	2017	2018	2019
<b>GDP growth</b>	Balanced	Balanced	Balanced
<b>Inflation</b>	Balanced	Balanced	Balanced

Sources: NBS.

## 7 COMPARISON WITH THE PREVIOUS FORECAST

### GDP GROWTH OUTLOOK REVISED DOWN SLIGHTLY IN THE LIGHT OF CURRENT DEVELOPMENTS

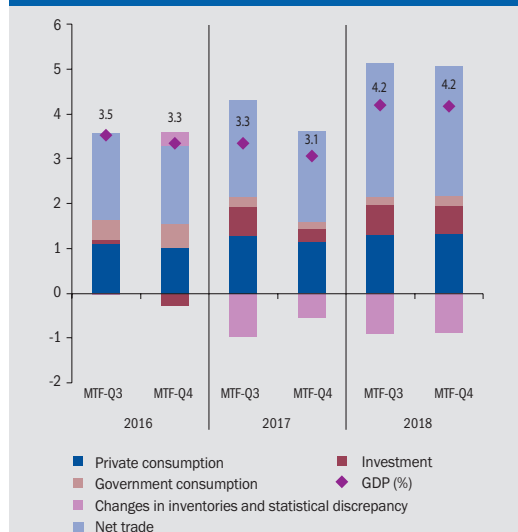
Compared with the September 2016 Medium-Term Forecast (MTF-2016Q3), the forecast for Slovakia's economic growth in 2016 has been revised down slightly. This was a response to third-quarter data that indicated slower growth in domestic demand and export performance. Foreign demand over the projection horizon is also expected to be moderately lower than previously projected, and, as a corollary, so is export growth. Domestic demand in the third quarter was softer than projected in the previous forecast, and that fact has been reflected in the outlook for next year. The forecast for private consumption growth has been revised down. Nevertheless, the most marked change refers to investment demand, which is expected to fall this year and then to rebound more slowly than previously projected. The extent of EU funds used for private investment appears to have been underestimated, with

this year's sharp reduction in EU funds affecting private investment mainly in the third quarter. Furthermore, declines in investment in certain other sectors have not been taken into account.

### IMPROVED LABOUR MARKET OUTLOOK

Recent trends in the labour market were again more favourable than projected in the previous forecast. With employers continuing to be positive in their expectations for the future, the employment growth outlook has been revised up for both this year and 2017. Most of the new job creation is not, however, expected to be fully reflected in a further decline in the unemployment rate, given the expected increases in labour force participation and in the recruitment of workers from abroad. The wage growth projection for 2018 is higher in this forecast than in the previous one, owing to the decline in labour market slack, higher inflation and the public sector's contribution.

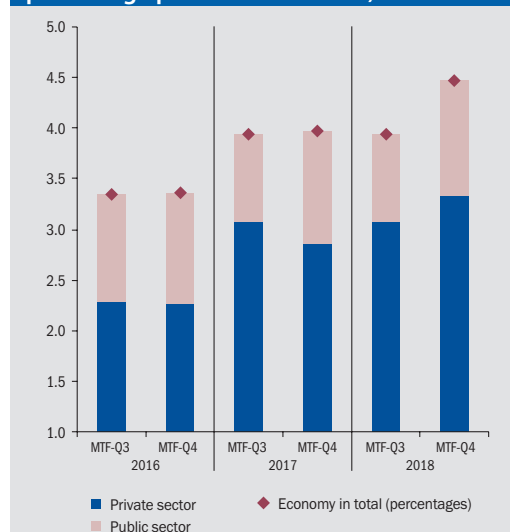
**Chart 10 GDP growth and its components<sup>8</sup>**  
(annual percentage changes; percentage point contributions)



Sources: SO SR and NBS.

Note: The item 'Changes in inventories and statistical discrepancy' includes unclassified imports that remained after the calculation of import intensity.

**Chart 11 Average wage in the economy and contributions from the public and private sectors**  
(annual percentage changes; percentage point contributions)



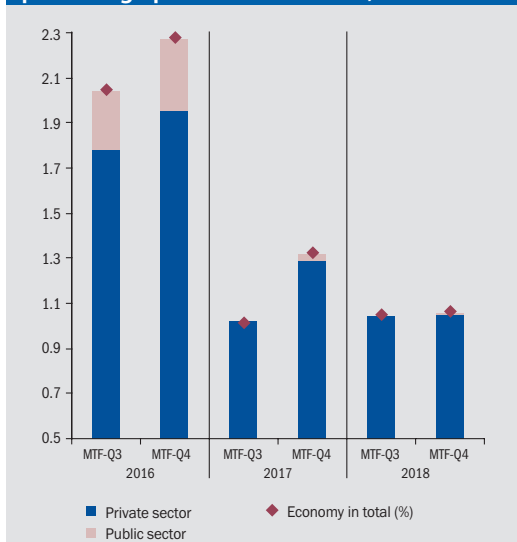
Sources: SO SR and NBS.

Note: The public sector comprises sections O, P and Q of the SK NACE Rev. 2 statistical classification of economic activities.

<sup>8</sup> The composition of GDP growth is calculated as the contributions of components to GDP growth after deducting their import intensity. In this case the calculation uses the constant import intensity of the different GDP components (household final consumption – 30%, government consumption – 7%, investment – 50%, and exports – 62.5%). Remaining imports were included under changes in inventories and the statistical discrepancy.



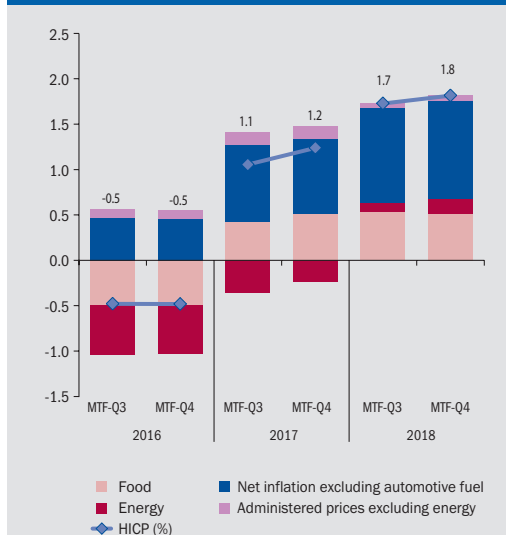
**Chart 12 Employment in the economy and contributions from the public and private sectors (annual percentage changes; percentage point contributions)**



Sources: SO SR and NBS.

Note: The public sector comprises sections O, P and Q of the SK NACE Rev. 2 statistical classification of economic activities

**Chart 13 HICP inflation and its components (annual percentage changes; percentage point contributions)**



Sources: SO SR and NBS.

**FOR THE FIRST TIME IN A WHILE, THE INFLATION OUTLOOK HAS NOT BEEN REVISED DOWN**

Inflation is expected to be slightly higher than projected in the September forecast, due to the impact of higher energy commodity prices over the projection horizon. The impact of energy

prices on the headline inflation rate in 2017 is expected to be less negative than previously projected, and energy inflation in 2018 is expected to be slightly higher. The estimated contribution of food inflation to inflation in 2017 has been revised up.



**Table 7 Medium-Term Forecast (MTF-2016Q4) for key macroeconomic indicators**

Indicator	Unit	Actual	MTF-2016Q4					Difference versus MTF-2016Q3			
		2015	2016	2017	2018	2019	2016	2017	2018	2019	
<b>Prices</b>											
HICP inflation	annual percentage change	-0.3	-0.5	1.2	1.8	1.9	0.0	0.1	0.1	-	
CPI inflation	annual percentage change	-0.3	-0.5	1.2	1.8	2.0	0.0	0.1	0.0	-	
GDP deflator	annual percentage change	-0.2	-0.4	1.3	1.9	2.1	-0.1	0.0	0.1	-	
<b>Economic activity</b>											
Gross domestic product	annual percentage change, constant prices	3.8	3.3	3.1	4.2	4.6	-0.2	-0.2	0.0	-	
Private consumption	annual percentage change, constant prices	2.2	2.8	3.1	3.7	3.7	-0.1	-0.4	0.2	-	
Final consumption of general government	annual percentage change, constant prices	5.4	2.9	0.9	1.3	1.7	0.3	-0.4	0.2	-	
Gross fixed capital formation	annual percentage change, constant prices	16.9	-2.3	2.6	5.7	4.1	-3.2	-3.1	-0.1	-	
Exports of goods and services	annual percentage change, constant prices	7.0	4.8	5.4	7.6	8.8	-0.4	-0.4	-0.1	-	
Imports of goods and services	annual percentage change, constant prices	8.1	2.7	4.7	7.4	8.1	-1.4	-1.4	0.0	-	
Net exports	EUR millions at constant prices	4,293	5,939	6,736	7,364	8,556	678	1,393	1,386	-	
Output gap	percentage of potential output	-1.0	-0.6	-0.4	0.2	0.9	0.0	0.1	0.2	-	
Gross domestic product	EUR millions at current prices	78,686	80,986	84,566	89,782	95,864	377	222	280	-	
<b>Labour market</b>											
Employment	thousands of persons, ESA 2010	2,267	2,319	2,349	2,374	2,395	5.3	12.7	13.1	-	
Employment	annual percentage change, ESA 2010	2.0	2.3	1.3	1.1	0.9	0.3	0.3	0.1	-	
Number of unemployed	thousands of persons <sup>1)</sup>	314	269	248	229	213	-4.6	-9.2	-7.5	-	
Unemployment rate	percentage	11.5	9.8	9.0	8.3	7.7	-0.1	-0.3	-0.2	-	
Unemployment gap <sup>2)</sup>	percentage points	1.8	0.2	-0.2	-0.5	-1.0	0.0	-0.1	0.0	-	
Labour productivity <sup>3)</sup>	annual percentage change	1.8	1.0	1.7	3.1	3.6	-0.5	-0.6	0.0	-	
Nominal productivity <sup>4)</sup>	annual percentage change	1.4	0.6	3.0	5.1	5.8	-0.5	-0.5	0.1	-	
Nominal compensation per employee	annual percentage change, ESA 2010	2.4	2.7	4.4	4.5	4.6	-0.1	0.5	0.6	-	
Nominal wages <sup>5)</sup>	annual percentage change	2.9	3.4	4.0	4.5	4.6	0.0	0.1	0.6	-	
Real wages <sup>6)</sup>	annual percentage change	3.2	3.9	2.7	2.6	2.5	0.0	-0.1	0.5	-	
<b>Households and non-profit institutions serving households</b>											
Disposable income	constant prices	4.0	3.7	3.4	3.7	3.6	-	-	-	-	
Saving ratio <sup>7)</sup>	percentage of disposable income	8.8	9.7	9.9	10.0	9.8	-	-	-	-	
<b>General government sector<sup>8)</sup></b>											
Total revenue	percentage of GDP	42.9	40.9	41.2	41.2	40.6	0.1	0.5	0.7	-	
Total expenditure	percentage of GDP	45.6	43.4	42.8	42.0	40.9	0.0	0.5	0.8	-	
General government balance <sup>9)</sup>	percentage of GDP	-2.7	-2.4	-1.6	-0.8	-0.3	0.1	0.0	0.0	-	
Cyclical component	percentage of trend GDP	-0.4	-0.1	0.0	0.2	0.3	-0.1	-0.1	-0.1	-	
Structural balance	percentage of trend GDP	-1.9	-2.0	-1.5	-1.0	-0.7	0.2	0.1	0.0	-	
Cyclically adjusted primary balance	percentage of trend GDP	-0.5	-0.7	0.0	0.4	0.7	0.1	0.1	0.0	-	
Fiscal stance <sup>10)</sup>	year-on-year change in p. p.	-0.4	-0.1	0.6	0.4	0.2	-0.2	0.0	0.0	-	
General government gross debt	percentage of GDP	52.5	52.9	52.6	51.1	50.1	0.0	0.1	0.0	-	



**Table 7 Medium-Term Forecast (MTF-2016Q4) for key macroeconomic indicators (continued)**

Indicator	Unit	Actual	MTF-2016Q4					Difference, versus, MTF-2016Q3			
		2015	2016	2017	2018	2019	2016	2017	2018	2019	
<b>Balance of Payments</b>											
Trade balance (goods)	percentage of GDP	2.7	3.9	4.2	4.3	5.0	0.8	1.8	1.8	-	
Current account	percentage of GDP	0.2	1.3	1.6	2.0	2.9	1.9	2.8	2.7	-	
<b>External environment and technical assumptions</b>											
Slovakia's foreign demand	annual percentage change	3.6	3.5	3.5	4.1	4.0	0.1	-0.2	-0.2	-	
Exchange rate (USD/EUR) <sup>11)</sup>	level	1.11	1.11	1.09	1.09	1.09	-0.5	-2.6	-2.6	-	
Oil price in USD <sup>11)</sup>	level	52.4	43.1	49.3	52.6	54.6	-1.8	-2.8	-1.5	-	
Oil price in USD	annual percentage change	-47.0	-17.7	14.3	6.7	3.7	-1.5	-1.1	1.4	-	
Oil price in EUR	annual percentage change	-36.6	-17.7	16.5	6.7	3.7	-1.1	1.3	1.4	-	
Non-energy commodity prices in USD	annual percentage change	-16.5	-4.0	6.6	3.8	4.5	-1.0	1.3	-0.4	-	
Three-month EURIBOR	percentage per annum	0.0	-0.3	-0.3	-0.2	0.0	0.0	0.1	0.2	-	
Ten-year Slovak government bond yields	percentage	0.9	0.5	0.9	1.1	1.3	0.1	0.5	0.5	-	

Sources: NBS, ECB and SO SR.

1) Labour Force Survey.

2) Difference between the unemployment rate and NAIRU (non-accelerating inflation rate of unemployment). A positive value indicates that the unemployment rate is higher than the NAIRU.

3) GDP at constant prices / employment – ESA 2010.

4) Nominal GDP divided by persons in employment (according to SO SR quarterly statistical reporting).

5) Average monthly wages (according to SO SR statistical reporting).

6) Wages according to SO SR statistical reporting, deflated by CPI inflation.

7) Saving ratio = gross savings / (gross disposable income + adjustments for any pension entitlement change) \*100; Gross savings = gross disposable income + adjustments for any pension entitlement change – private consumption.

8) S.13; fiscal outlook.

9) B9n – Net lending (+) / borrowing (-)

10) Year-on-year change in cyclically adjusted primary balance; a positive value denotes tightening.

11) Changes vis-à-vis the previous forecast (percentages).

Time series of selected macroeconomic indicators can be found on the NBS website at [http://www.nbs.sk/\\_img/Documents/\\_Publikacie/PREDIK/2016/protected/P4Q-2016.xls](http://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2016/protected/P4Q-2016.xls)